



DEPARTMENT OF THE ARMY
PHILADELPHIA DISTRICT, CORPS OF ENGINEERS
WANAMAKER BUILDING, 100 PENN SQUARE EAST
PHILADELPHIA, PENNSYLVANIA 19107-3380

REPLY TO
ATTENTION OF

MAY 07 2001

Regulatory Branch
Application Section I

SUBJECT: CENAP-OP-R-200100640-45 (NW07, NW12, NW33)
NJDEP #: 1017-97-0003.3/.5
Project Name: NJ DEPT OF TRANSPORTATION
Applicant: New Jersey Department of Transportation
Waterway: Delaware and Raritan Canal
Location: Along Delaware Avenue, City of Lambertville,
Hunterdon County, New Jersey.

Mr. Bruce Hawkinson
State of New Jersey Department of Transportation
P.O. Box 600
Trenton, New Jersey 08625-0600

Dear Mr. Hawkinson:

This is in regard to your proposal to complete the construction and installation of two parallel 60 inch stormwater pipes (Delaware Avenue Trunkline) under the Delaware and Raritan Canal (D&R) by microtunneling techniques, and temporary cofferdam initially authorized by this office on March 3, 1998, for the purpose of floodwater control, in the city of Lambertville, Hunterdon County, New Jersey. In addition, the reverification of these Nationwide Permits include the extension of the PVC liner within the D&R Canal to enlarge the temporary dewatering area and/or cofferdam, the installation of grout material under the D&R Canal liner, the installation of temporary dewatering wells and piezometers within the D&R Canal, and to install the stormwater pipes within Delaware Avenue by cut and cover techniques.

Under current Federal regulations, a Department of the Army permit is required for work or structures in navigable waters of the United States and/or the discharge of dredged or fill material into waters of the United States including adjacent and isolated wetlands. Based upon our review of the information you have provided, it has been determined that the proposed work is approved by the existing Department of the Army nationwide permit (NWP) described below, provided the work is conducted in compliance with the general and special conditions specified in this letter.

Nationwide Permit 7. Outfall Structures and Maintenance: Activities related to:

- (i) construction of outfall structures and associated intake structures where the effluent from the outfall is authorized, conditionally authorized, or specifically exempted, or is otherwise in compliance with regulations issued under the National Pollutant Discharge Elimination System program (Section 402 of the Clean Water Act), and
- (ii) maintenance excavation, including dredging, to remove accumulated sediments blocking or restricting outfall and intake structures, accumulated sediments from small impoundments associated with outfall and intake structures, and accumulated sediments from canals associated with outfall and intake structures, provided the activity meets all of the following criteria:

- a. The permittee notifies the District Engineer in accordance with General Condition 13;

- b. The amount of excavated or dredged material must be the minimum necessary to restore the outfalls, intakes, small impoundments, and canals to original design capacities and design configurations (i.e., depth and width);
- c. The excavated or dredged material is deposited and retained at an upland site, unless otherwise approved by the District Engineer under separate authorization; and
- d. Proper soil erosion and sediment control measures are used to minimize reentry of sediments into waters of the United States.

The construction of intake structures is not authorized by this NWP, unless they are directed associated with an authorized outfall structure. For maintenance excavation and dredging to remove accumulated sediments, the notification must include information regarding the original design capacities and configurations of the facility and the presence of special aquatic sites (e.g., vegetated shallows) in the vicinity of the proposed work. (Sections 10 and 404)

Nationwide Permit 12. Utility Line Activities: Activities required for the construction, maintenance, and repair of utility lines and associated facilities in waters of the United States as follows:

(i) Utility lines: The construction, maintenance, or repair of utility lines, including outfall and intake structures and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in preconstruction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquefiable, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone and telegraph messages, and radio and television communication (see Note 1, below). Material resulting from trench excavation may be temporarily sidecast (up to three months) into waters of the United States, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The District Engineer may extend the period of temporary side casting not to exceed a total of 180 days, where appropriate. In wetlands, the top 6" to 12" of the trench should normally be backfilled with topsoil from the trench. Furthermore, the trench cannot be constructed in such a manner as to drain waters of the United (e.g., backfilling with extensive gravel layers, creating a french drain effect). For example, utility line trenches can be backfilled with clay blocks to ensure that the trench does not drain the waters of the United States through which the utility line is installed. Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

(ii) Utility line substations: The construction, maintenance, or expansion of a substation facility associated with a power line or utility line in non-tidal waters of the United States, excluding non-tidal wetlands adjacent to tidal waters, provided the activity does not result in the loss of greater than 1/2 acre of non-tidal waters of the United States.

(iii) Foundations for overhead utility line towers, poles, and anchors: The construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

(iv) Access roads: The construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, excluding non-tidal wetlands adjacent to tidal waters, provided, the discharge does not cause the loss of greater than 1/2 acre of non-tidal waters of the United States. Access road shall be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes the adverse effects on waters of the United States and as near as possible to preconstruction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above preconstruction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

The term "utility line" does not include activities which drain a water of the United States, such as drainage tile or french drains; however, it does apply to pipes conveying drainage from another area. For the purposes of this NWP, the loss of waters of the United States includes the filled area plus waters of the United States that are adversely affected by flooding, excavation, or drainage as a result of the project. Activities authorized by paragraphs (i) through (iv) may not exceed a total of 1/2 acre loss of waters of the United States. Waters of the United States temporarily affected by filling, flooding, excavation, or drainage, where the project area is restored to preconstruction contours and elevations, are not included in the calculation of permanent loss of waters of the United States. This includes temporary construction mats (e.g., timber, steel, geotextile) used during construction and removed upon completion of the work. Where certain functions and values of waters of the United States are permanently adversely affected, such as the conversion of a forested wetland to a herbaceous wetland in the permanently maintained utility line right-of-way, mitigation will be required to reduce the adverse effects of the project to the minimal level.

Mechanized landclearing necessary for the construction, maintenance, or repair of utility lines and the construction, maintenance, and expansion of utility line substations, foundations for overhead utility lines, and access roads is authorized, provided the cleared area is kept to the minimum necessary and preconstruction contours are maintained as near as possible. The area of waters of the United States that is filled, excavated, or flooded must be limited to the minimum necessary to construct the utility line, substations, foundations, and access roads. Excess material must be removed to upland areas immediately upon completion of construction. This NWP may authorize utility lines in or affecting navigable waters of the United States, even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322).

Notification: The permittee must notify the District Engineer in accordance with General Condition 13, if any of the following criteria are met:

(a) Mechanized landclearing in a forested wetland for the utility line right-of-way;

(b) A Section 10 permit is required;

(c) The utility line in waters of the United States, excluding overhead lines, exceeds 500 feet;

(d) The utility line is placed within a jurisdictional area (i.e., a water of the United States), and it runs parallel to a stream bed that is within that jurisdictional area.

(e) Discharges associated with the construction of utility line substations that result in the loss of greater than 1/10 acre of waters of the United States;

(f) Permanent access roads constructed above grade in waters of the United States for a distance of more than 500 feet; or

(g) Permanent access roads constructed in waters of the United States with impervious materials. (Sections 10 and 404)

Note 1: Overhead utility lines constructed over Section 10 waters and utility lines that are routed in or under Section 10 waters without a discharge of dredged or fill material require a Section 10 permit; except for pipes or pipelines used to transport gaseous, liquid, liquefiable, or slurry substances over navigable waters of the United States, which are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material associated with such pipelines will require a Corps permit under Section 404.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work and the area restored to preconstruction contours, elevations, and wetland conditions. Temporary access roads for construction may be authorized by NWP 33.

Note 3: Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., Section 10 waters, copies of the PCN and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration, National Ocean Service, for charting the utility line to protect navigation.

Nationwide Permit 33. Temporary Construction, Access and Dewatering: Temporary structures, work and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites; provided that the associated primary activity is authorized by the Corps of Engineers or the U.S. Coast Guard, or for other construction activities not subject to the Corps or U.S. Coast Guard regulations. Appropriate measures must be taken to maintain near normal downstream flows and to minimize flooding. Fill must be of materials, and placed in a manner, that will not be eroded by expected high flows. The use of dredged material may be allowed if it is determined by the District Engineer that it will not cause more than minimal adverse effects on aquatic resources. Temporary fill must be entirely removed to upland areas, or dredged material returned to its original location, following completion of the construction activity, and the affected areas must be restored to the pre-project conditions. Cofferdams cannot be used to dewater wetlands or other aquatic areas so as to change their use. Structures left in place after cofferdams are removed require a Section 10 permit if located in navigable waters of the United States. (See 33 CFR part 322.) The permittee must notify the District Engineer in accordance with the "Notification" general condition. The notification must also include a restoration plan of reasonable measures to avoid and minimize adverse effects

to aquatic resources. The District Engineer will add special conditions, where necessary, to ensure that adverse environmental effects are minimal. Such conditions may include: limiting the temporary work to the minimum necessary; requiring seasonal restrictions; modifying the restoration plan; and requiring alternative construction methods (e.g., construction mats in wetlands where practicable). (Sections 10 and 404)

This authorization does not affect your responsibility to obtain any other Federal, State or local approval(s) required by law for the proposed work before beginning work.

The enclosed table (Enclosure 1) identifies those NWP's which require a preconstruction notification (PCN) to the Corps of Engineers, those which have been regionally conditioned by the Division Engineer, and those which have been denied 401 Water Quality Certification (WQC) and/or Coastal Zone Management (CZM) consistency by the State. It is noted that CZM consistency from the State is only required for those activities in or affecting a State's coastal zone. Additionally, some of the NWP's do not involve a discharge of dredged or fill material, and as such, do not require a 401 WQC. For those NWP's not requiring a 401 WQC, the appropriate rows and columns have been identified with the term "NA". If the State has denied the required WQC and/or not concurred with the Corps' CZM consistency determination, the NWP authorization is considered denied without prejudice until an individual project specific WQC and/or CZM approval is obtained. This approval must be obtained in order for the activity to be authorized under the NWP and a copy provided to this office before work begins. Any project specific conditions required by the State for the WQC and/or CZM approval will automatically become part of the NWP authorization.

You should carefully note that this NWP authorization is based upon your agreement to comply with the terms and conditions of this NWP (Enclosure 2), including any and all attached project specific special conditions listed below. Initiation of any authorized work shall constitute your agreement to comply with all of the NWP's conditions. You should also note that the authorized work may be subject to periodic inspections by a representative of this office.

PROJECT SPECIFIC SPECIAL CONDITIONS:

1. All work performed in association with the above noted project shall be conducted in accordance with the project plans identified as "New Jersey Department of Transportation...", dated/approved January 4, 2001, no revisions, prepared by The RBA Group, sheets 1, 4, 5, 6, 7, 12, 13, 14, 33, 34, 35, 46, 47, 48, and 50 of 50.
2. Construction activities shall not result in the disturbance or alteration of greater than 0.02 acres of waters of the United States.
3. Any deviation in construction methodology or project design from that shown on the above noted drawings must be approved by this office, in writing, prior to performance of the work. All modifications to the above noted project plans shall be approved, in writing, by this office. No work shall be performed prior to written approval of this office.
4. This office shall be notified at least 10 days prior to the commencement of authorized work by completing and signing the enclosed Notification/

Certification of Work Commencement Form (Enclosure 3). This office shall also be notified within 10 days of the completion of the authorized work by completing and signing the enclosed Notification/Certification of Work Completion/Compliance Form (Enclosure 4). All notifications required by this condition shall be in writing and shall be transmitted to this office by registered mail. Oral notifications are not acceptable. Similar notification is required each time maintenance work is to be done under the terms of this Corps of Engineers permit.

5. That the disposal of trees, brush and other debris in any stream corridor, wetland or surface water is prohibited.

6. That upon completion of the authorized work, all areas disturbed during construction shall be returned to their condition prior to project implementation; this includes all stream and D&R Canal bed and bank contours.

7. That after completion of construction, all rip-rapped areas shall be backfilled with 6 inches of compacted top soil and permanently stabilized by jute matting and native vegetation to the area.

8. That the permittee shall comply with all terms, conditions, and stipulations as specified in the Memorandum of Agreement (MOA) entitled "Memorandum of Agreement Between the United States Army Corps of Engineers, The New Jersey State Historic Preservation Officer, and The New Jersey Department of Transportation Submitted to The Advisory Council on Historic Preservation Pursuant to 36 CFR 800 and 33 CFR 325 Appendix C Regarding Installation of The Delaware Avenue Trunkline City of Lambertville, Hunterdon County, New Jersey", dated April 10, 2001 (Enclosure 6).

9. That the mechanical equipment used to execute the work authorized shall be operated in such a way as to minimize turbidity that could degrade water quality and adversely affect aquatic plant and animal life.

10. That efforts shall be made to keep construction debris from entering the waterway or wetland. Debris in the waterway or wetland shall be removed immediately.

11. That the fill material shall be free of oil and grease, debris, wood, general refuse, plaster, and other pollutants, and shall contain no broken asphalt.

12. That the authorized excavation, filling and associated activities shall be performed in accordance with the State and/or County standards for Soil Erosion Sediment Control.

13. That all temporary fills, structures, and work (cofferdams, retrieval shaft, dewatering well, piezometers, etc.) shall be removed in their entirety, and the area returned to its pre-construction condition.

14. That the permittee is responsible for ensuring that the contractor and/or workers executing the activity(s) authorized by this permit have knowledge of the terms and conditions of the authorization and that a copy of the permit document is at the project site throughout the period the work is underway.

15. That the stormwater pipes shall be installed to provide for a minimum of 4 feet between the original bed of the waterway (D&R Canal) and the top of the pipe.

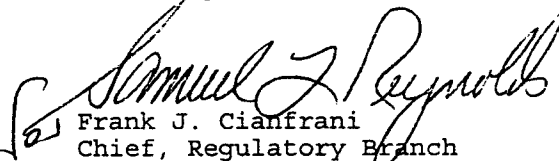
16. That upon completion of the work, the permittee shall furnish the Corps and National Oceanic and Atmospheric Administration, NOS, N/CS261, Marine Chart Division, Nautical Data Branch, Station 7317, 1315 East-West Highway, Silver Spring, Maryland 20910-3282 with certification that the pipeline has been installed in compliance with the approved plans. The certification shall include a survey, conducted by a licensed surveyor, which clearly shows the elevation of the top of the pipeline and its alignment across the waterway. Any discrepancies shall be clearly identified/noted.

You are advised that this verification of NWP authorization is valid for two (2) years from the date of this letter, unless the NWP authorization is modified, suspended, or revoked. In the event that the NWP authorization is reissued and/or modified during that time period, this two-year expiration date will remain valid, provided the activity complies with any subsequent reissuance and/or modification of the NWP authorization.

The existing NWPs will expire on February 11, 2002. Activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon a NWP, will remain authorized provided the activity is completed within 12 months of the date of the NWP's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization. As such, any work to be completed beyond this date in reliance upon this existing NWP must be completed by February 11, 2003. Activities completed under the authorization of a NWP which was in effect at the time the activity was completed, continue to be authorized by that NWP. Accordingly, it is incumbent upon you to remain informed of any changes to the NWP authorization(s).

Also enclosed is a pre-addressed postal card (Enclosure 5) soliciting your comments on the processing of your application. Any comments, positive or otherwise, on the procedures, timeliness, fairness, etc., may be made on this card. If you should have any questions regarding this matter, please contact Bryan P. Bellacima of this office at (215) 656-6732 or write to the above address.

Sincerely,


[2] Frank J. Cianfrani
Chief, Regulatory Branch

Enclosures

Nationwide Permit General Conditions

The following general conditions must be followed in order for any authorization by an NWP to be valid:

1. **Navigation.** No activity may cause more than a minimal adverse effect on navigation.
2. **Proper Maintenance.** Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.
3. **Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date.
4. **Aquatic Life Movements.** No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including those species which normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
5. **Equipment.** Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.
6. **Regional and Case-By-Case Conditions.** The activity must comply with any regional conditions which may have been added by the division engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the State or tribe in its Section 401 water quality certification and Coastal Zone Management Act consistency determination.
7. **Wild and Scenic Rivers.** No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status; unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation, or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
8. **Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
9. **Water Quality.** (a) In certain States and tribal lands an individual 401 water quality certification must be obtained or waived (See 33 CFR 330.4(c)).
(b) For NWPs 12, 14, 17, 18, 32, 39, 40, 42, 43, and 44, where the State or tribal 401 certification (either generically or individually) does not require or approve a water quality management plan, the permittee must include design criteria and techniques that will ensure that the authorized work does not result in more than minimal degradation of water quality. An important component of a water quality management plan includes stormwater management that minimizes degradation of the downstream aquatic system, including water quality. Refer to General Condition 21 for stormwater management requirements. Another important component of a water quality management plan is the establishment and maintenance of vegetated buffers next to open waters, including streams. Refer to General Condition 19 for vegetated buffer requirements for the NWPs.
10. **Coastal Zone Management.** In certain states, an individual state coastal zone management consistency concurrence must be obtained or waived (see Section 330.4(d)).
11. **Endangered Species.** (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which will destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or is located in the designated critical habitat and shall not begin work on the activity until notified by the District Engineer that the requirements of the Endangered Species Act have been satisfied and that the activity is authorized. For activities that may affect Federally-listed endangered or threatened species or designated critical habitat, the notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the FWS or NMFS, the District Engineer may add species-specific regional endangered species conditions to the NWPs.
(b) Authorization of an activity by a nationwide permit does not authorize the "take" of a threatened or endangered species as defined under the Federal Endangered Species Act. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, both lethal and non-lethal "takes" of protected species are in violation of the Endangered Species Act. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. Fish and Wildlife Service and National Marine Fisheries Service or their world wide web pages at <http://www.fws.gov/r9endspp/endspp.html> and http://www.nfms.gov/prot_res/esahome.html, respectively.
12. **Historic Properties.** No activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the DE has complied with the provisions of 33 CFR Part 325, Appendix C. The prospective permittee must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)). For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the notification

must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

13. Notification.

(a) Timing: Where required by the terms of the NWP, the prospective permittee must notify the District Engineer with a preconstruction notification (PCN) as early as possible. The District Engineer must determine if the PCN is complete within 30 days of the date of receipt and can request the additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the District Engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the District Engineer. The prospective permittee shall not begin the activity:

(1) Until notified in writing by the District Engineer that the activity may proceed under the NWP with any special conditions imposed by the District or Division Engineer; or

(2) If notified in writing by the District or Division Engineer that an individual permit is required; or

(3) Unless 45 days have passed from the District Engineer's receipt of the complete notification and the prospective permittee has not received written notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Notification: The notification must be in writing and include the following information:

(1) Name, address, and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity; and

(4) For NWPs 7, 12, 14, 18, 21, 34, 38, 39, 40, 42, and 43, the PCN must also include a delineation of affected special aquatic sites, including wetlands, vegetated shallows (e.g., submerged aquatic vegetation, seagrass beds), and riffle and pool complexes (see paragraph 13(f));

(5) For NWP 7, Outfall Structures and Maintenance, the PCN must include information regarding the original design capacities and configurations of those areas of the facility where maintenance dredging or excavation is proposed.

(6) For NWP 14, Linear Transportation Crossings, the PCN must include a compensatory mitigation proposal to offset permanent losses of waters of the United States and a statement describing how temporary losses of waters of the United States will be minimized to the maximum extent practicable.

(7) For NWP 21, Surface Coal Mining Activities, the PCN must include an Office of Surface Mining (OSM) or state-approved mitigation plan.

(8) For NWP 27, Stream and Wetland Restoration, the PCN must include documentation of the prior condition of the site that will be reverted by the permittee.

(9) For NWP 29, Single-Family Housing, the PCN must also include:

(i) Any past use of this NWP by the individual permittee and/or the permittee's spouse;

(ii) A statement that the single-family housing activity is for a personal residence of the permittee;

(iii) A description of the entire parcel, including its size, and a delineation of wetlands. For the purpose of this NWP, parcels of land measuring 1/4 acre or less will not require a formal on-site delineation. However, the applicant shall provide an indication of where the wetlands are and the amount of wetlands that exists on the property. For parcels greater than 1/4 acre in size, a formal wetland delineation must be prepared in accordance with the current method required by the Corps. (See paragraph 13(f));

(iv) A written description of all land (including, if available, legal descriptions) owned by the prospective permittee and/or the prospective permittee's spouse, within a one mile radius of the parcel, in any form of ownership (including any land owned as a partner, corporation, joint tenant, co-tenant, or as a tenant-by-the-entirety) and any land on which a purchase and sale agreement or other contract for sale or purchase has been executed;

(10) For NWP 31, Maintenance of Existing Flood Control Projects, the prospective permittee must either notify the District Engineer with a PCN prior to each maintenance activity or submit a five year (or less) maintenance plan. In addition, the PCN must include all of the following:

(i) Sufficient baseline information so as to identify the approved channel depths and configurations and existing facilities. Minor deviations are authorized, provided the approved flood control protection or drainage is not increased;

(ii) A delineation of any affected special aquatic sites, including wetlands; and,

(iii) Location of the dredged material disposal site.

(11) For NWP 33, Temporary Construction, Access, and Dewatering, the PCN must also include a restoration plan of reasonable measures to avoid and minimize adverse effects to aquatic resources.

(12) For NWPs 39, 43, and 44, the PCN must also include a written statement to the District Engineer explaining how avoidance and minimization of losses of waters of the United States were achieved on the project site.

(13) For NWP 39, Residential, Commercial, and Institutional Developments, the PCN must include a compensatory mitigation proposal that offsets unavoidable losses of waters of the United States or justification explaining why compensatory mitigation should not be required.

(14) For NWP 40, Agricultural Activities, the PCN must include a compensatory mitigation proposal to offset losses of waters of the United States.

(15) For NWP 43, Stormwater Management Facilities, the PCN must include, for the construction of new stormwater management facilities, a maintenance plan (in accordance with State and local requirements, if applicable) and a compensatory mitigation proposal to offset losses of waters of the United States.

(16) For NWP 44, Mining Activities, the PCN must include a description of all waters of the United States adversely affected by the project, a description of measures taken to minimize adverse effects to waters of the United States, a description of measures taken to comply with the criteria of the NWP, and a reclamation plan (for aggregate mining activities in isolated waters and non-tidal wetlands adjacent to headwaters and any hard rock/mineral mining activities).

(17) For activities that may adversely affect Federally-listed endangered or threatened species, the PCN must include the name(s) of those endangered or threatened species that may be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work.

(18) For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

(19) For NWPs 12, 14, 29, 39, 40, 42, 43, and 44, where the proposed work involves discharges of dredged or fill material into waters of the United States resulting in permanent, above-grade fills within 100-year floodplains (as identified on FEMA's Flood Insurance Rate Maps or FEMA-approved local floodplain maps), the notification must include documentation demonstrating that the proposed work complies with the appropriate FEMA or FEMA-approved local floodplain construction requirements.

(c) Form of Notification: The standard individual permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PCN and must include all of the information required in (b) (1)-(19) of General Condition 13. A letter containing the requisite information may also be used.

(d) District Engineer's Decision: In reviewing the PCN for the proposed activity, the District Engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. The prospective permittee may, optionally, submit a proposed mitigation plan with the PCN to expedite the process and the District Engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. If the District Engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, the District Engineer will notify the permittee and include any conditions the District Engineer deems necessary.

Any compensatory mitigation proposal must be approved by the District Engineer prior to commencing work. If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the District Engineer will expeditiously review the proposed compensatory mitigation plan. The District Engineer must review the plan within 45 days of receiving a complete PCN and determine whether the conceptual or specific proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant stating that the project can proceed under the terms and conditions of the nationwide permit.

If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then he will notify the applicant either: (1) that the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the District Engineer determines that mitigation is required in order to ensure no more than minimal adverse effects on the aquatic environment, the activity will be authorized within the 45-day PCN period, including the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level. When conceptual mitigation is included, or a mitigation plan is required under item (2) above, no work in waters of the United States will occur until the District Engineer has approved a specific mitigation plan.

(e) Agency Coordination: The District Engineer will consider any comments from Federal and State agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse effects on the aquatic environment to a minimal level.

For activities requiring notification to the District Engineer that result in the loss of greater than 1/2 acre of waters of the United States, the District Engineer will, upon receipt of a notification, provide immediately (e.g., via facsimile transmission, overnight mail, or other expeditious manner), a copy to the appropriate offices of the Fish and Wildlife Service, State natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO), and, if appropriate, the National Marine Fisheries Service. With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the District Engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 15 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. As required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act, the District Engineer will provide a response to National Marine Fisheries Service within 30 days of receipt of any

Essential Fish Habitat conservation recommendations. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification.

(f) Wetlands Delineations: Wetland delineations must be prepared in accordance with the current method required by the Corps. For NWP 29 see paragraph (b)(9)(iii) for parcels less than 1/4 acre in size. The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 45-day period will not start until the wetland delineation has been completed and submitted to the Corps, where appropriate.

14. Compliance Certification. Every permittee who has received a Nationwide permit verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter. The certification will include: a.) A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions; b.) A statement that any required mitigation was completed in accordance with the permit conditions; and c.) The signature of the permittee certifying the completion of the work and mitigation.

15. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3 acre.

16. Water Supply Intakes. No activity, including structures and work in navigable waters of the United States or discharges of dredged or fill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.

17. Shellfish Beds. No activity, including structures and work in navigable waters of the United States or discharges of dredged or fill material, may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.

18. Suitable Material. No activity, including structures and work in navigable waters of the United States or discharges of dredged or fill material, may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).

19. Mitigation. The project must be designed and constructed to avoid and minimize adverse effects to waters of the United States to the maximum extent practicable at the project site (i.e., on site). Mitigation will be required when necessary to ensure that the adverse effects to the aquatic environment are minimal. The District Engineer will consider the factors discussed below when determining the acceptability of appropriate and practicable mitigation necessary to offset adverse effects on the aquatic environment that are more than minimal.

(a) To be practicable, the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of the overall project purposes. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferably in the same watershed;

(b) The District Engineer will require restoration, creation, enhancement, or preservation of other aquatic resources in order to offset the authorized impacts to the extent necessary to ensure that the adverse effects on the aquatic environment are minimal. An important element of any compensatory mitigation plan for projects in or near streams or other open waters is the establishment and maintenance, to the maximum extent practicable, of vegetated buffers next to open waters on the project site. The vegetated buffer should consist of native species. The District Engineer will determine the appropriate width of the vegetated buffer and in which cases it will be required. Normally, the vegetated buffer will be 25 to 50 feet wide on each side of the stream, but the District Engineer may require wider vegetated buffers to address documented water quality concerns. If there are open waters on the project site and the District Engineer requires compensatory mitigation for wetland impacts to ensure that the net adverse effects on the aquatic environment are minimal, any vegetated buffer will comprise no more than 1/3 of the remaining compensatory mitigation acreage after the permanently filled wetlands have been replaced on a one-to-one acreage basis. In addition, compensatory mitigation must address adverse effects on wetland functions and values and cannot be used to offset the acreage of wetland losses that would occur in order to meet the acreage limits of some of the NWPs (e.g., for NWP 39, 1/4 acre of wetlands cannot be created to change a 1/2 acre loss of wetlands to a 1/4 acre loss; however, 1/2 acre of created wetlands can be used to reduce the impacts of a 1/3 acre loss of wetlands). If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed.

(c) To the extent appropriate, permittees should consider mitigation banking and other appropriate forms of compensatory mitigation. If the District Engineer determines that compensatory mitigation is necessary to offset losses of waters of the United States and ensure that the net adverse effects of the authorized work on the aquatic environment are minimal, consolidated mitigation approaches, such as mitigation banks, will be the preferred method of providing compensatory mitigation, unless the District Engineer determines that activity-specific compensatory mitigation is more appropriate, based on which is best for the aquatic environment. These types of mitigation are preferred because they involve larger blocks of protected aquatic environment, are more likely to meet the mitigation goals, and are more easily checked for compliance. If a mitigation bank or other consolidated mitigation approach is not available in the watershed, the District Engineer will consider other appropriate forms of compensatory mitigation to offset the losses of waters of the United States to ensure that the net adverse effects of the authorized work on the aquatic environment are minimal.

20. **Spawning Areas.** Activities, including structures and work in navigable waters of the United States or discharges of dredged or fill material, in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.

21. **Management of Water Flows.** To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and must not increase water flows from the project site, relocate water, or redirect water flow beyond preconstruction conditions. In addition, the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows.

22. **Adverse Effects From Impoundments.** If the activity, including structures and work in navigable waters of the United States or discharge of dredged or fill material, creates an impoundment of water, adverse effects on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow shall be minimized to the maximum extent practicable.

23. **Waterfowl Breeding Areas.** Activities, including structures and work in navigable waters of the United States or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

24. **Removal of Temporary Fills.** Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

25. **Designated Critical Resource Waters.** Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, State natural heritage sites, and outstanding national resource waters or other waters officially designated by a State as having particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public comment. The District Engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Except as noted below, discharges of dredged or fill material into waters of the United States are not authorized by NWP 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, and 44 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill materials into waters of the United States may be authorized by the above NWPs in National Wild and Scenic Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened or endangered species if the activity complies with General Condition 11 and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service has concurred in a determination of compliance with this condition.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with General Condition 13, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The District Engineer may authorize activities under these NWPs only after he determines that the impacts to the critical resource waters will be no more than minimal.

26. **Fills Within 100-Year Floodplains.** For purposes of this general condition, 100-year floodplains will be identified through the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or FEMA-approved local floodplain maps.

(a) **Discharges Below Headwaters.** Discharges of dredged or fill material into waters of the United States resulting in permanent, above-grade fills within the 100-year floodplain at or below the point on a stream where the average annual flow is five cubic feet per second (i.e., below headwaters) are not authorized by NWPs 29, 39, 40, 42, 43, and 44. For NWPs 12 and 14, the prospective permittee must notify the District Engineer in accordance with General Condition 13 and the notification must include documentation that any permanent, above-grade fills in waters of the United States within the 100-year floodplain below headwaters comply with FEMA or FEMA-approved local floodplain construction requirements.

(b) **Discharges in Headwaters** (i.e., above the point on a stream where the average annual flow is five cubic feet per second).

(1) **Flood Fringe.** Discharges of dredged or fill material into waters of the United States resulting in permanent, above-grade fills within the flood fringe of the 100-year floodplain of headwaters are not authorized by NWPs 12, 14, 29, 39, 40, 42, 43, and 44, unless the prospective permittee notifies the District Engineer in accordance with General Condition 13. The notification must include documentation that such discharges comply with FEMA or FEMA-approved local floodplain construction requirements.

(2) **Floodway.** Discharges of dredged or fill material into waters of the United States resulting in permanent, above-grade fills within the floodway of the 100-year floodplain of headwaters are not authorized by NWPs 29, 39, 40, 42, 43, and 44. For NWPs 12 and 14, the permittee must notify the District Engineer in accordance with General Condition 13 and the notification must include documentation that any permanent, above grade fills proposed in the floodway comply with FEMA or FEMA-approved local floodplain construction requirements.

APRIL 10, 2001
MEMORANDUM OF AGREEMENT
BETWEEN THE UNITED STATES ARMY CORPS OF ENGINEERS,
THE NEW JERSEY STATE HISTORIC PRESERVATION OFFICER, AND
THE NEW JERSEY DEPARTMENT OF TRANSPORTATION
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 CFR 800 and 33 CFR 325 APPENDIX C
REGARDING INSTALLATION OF THE
Delaware Avenue Trunkline
City of Lambertville
Hunterdon County
New Jersey

WHEREAS, in order to improve drainage and minimize flooding in the Lambertville Historic District, the New Jersey Department of Transportation (NJDOT) proposes to install the **Delaware Avenue Trunkline** in the City of Lambertville, New Jersey using funds administered by the NJDOT; and

WHEREAS, the NJDOT initially submitted an application to the United States Army Corps of Engineers (USACOE) for installation of the Delaware Avenue Trunkline through directional drilling; and

WHEREAS, a finding of no effect to the Lambertville Historic District and the Delaware and Raritan Canal Historic District, properties which are listed in the National Register of Historic Places, was made by the New Jersey State Historic Preservation Officer (NJSHPO) on May 9, 1997; and

WHEREAS, the permit was issued by the USACOE for the original project on March 3, 1998; and

WHEREAS, the NJDOT has modified the installation methodology of the Delaware Avenue Trunkline and has submitted a request for a modification to the USACOE original permit on April 20, 2000; and

WHEREAS, the undertaking includes installation of an eighty-four inch (84") diameter fiberglass circular pipe below Delaware Avenue through cut and cover technique; and

WHEREAS, a secondary drainage system will be constructed behind the Lambertville Elementary School in order to improve drainage in the Lambertville Historic District, and will connect to the 84" pipe; and

WHEREAS, at the Delaware and Raritan Canal, a transition will be made to two (2) sixty inch (60") fiberglass pipes running under the Canal prism and the adjacent railroad to the outfall; and

WHEREAS, the undertaking includes the siting of a retrieval shaft at the existing headwall on the west bank of the Delaware and Raritan Canal; and

WHEREAS, an open excavation at the base of Delaware Avenue to install a chamber carrying these two (2) sixty inch (60") diameter pipes will occur within the existing road; and

WHEREAS, USACOE has determined that the revised Delaware Avenue Trunkline Installation Project will have an effect upon the Lambertville Historic District and the Delaware and Raritan Canal Historic District, properties which are listed in the National Register of Historic Places; and has consulted with NJSHPO pursuant to 36 CFR Part 800 and 33 CFR 325 Appendix C, regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470f); and

WHEREAS, the Lambertville Historic District and the Delaware and Raritan Canal Historic District will be adversely affected because the project proposes to remove/alter historic materials which characterize the historic properties (Secretary of the Interior's Standard 1); to remove/alter distinctive finishes, construction techniques, and examples of craftsmanship which characterize the historic properties (Standard 5); and the new construction will destroy historic materials that characterize the historic properties (Standard 9); and

WHEREAS, the NJDOT has afforded the community the opportunity to comment on the project through at least a minimum of three (3) public information centers and public meetings; and

WHEREAS, the City of Lambertville, Hunterdon County, New Jersey passed a resolution in support of the project on February 22, 2000; and

WHEREAS, a Drainage Advisory Committee comprised of representatives from the City, the Lambertville Board of Education, the DOT, and residents of Delaware Avenue and the flood-affected area of Arnett Avenue West, Buttonwood Street, Elm Street, North Franklin Street, and North Main Street has been organized to resolve outstanding issues as the drainage project advances; and

WHEREAS, the NJDOT will continue to provide an engineering consultant to work with the Drainage Advisory Committee to adjudicate any issue including addressing any changes associated with current day conditions; and

WHEREAS, the Drainage Advisory Committee has met on numerous occasions, and, with majority support of the project, has facilitated notification concerning mitigation measures in correspondence to the residents of Delaware Avenue; and

WHEREAS, the project has the potential to damage existing historical fabric, such as but not limited to, sidewalk, curbing, vegetation, houses, and structures; and

WHEREAS, the residents of Delaware Avenue have been given the opportunity to choose the historically compatible materials of the restoration from a prepared list based on historic precedent; and

WHEREAS, the project has the potential to affect unknown archeological resources; and

WHEREAS, specific construction techniques and thresholds have been developed to minimize/mitigate the potential effects of this project and are contained within the Contract Documents signed on January 4, 2001 (copies of Bid Documents are on file with the Lambertville City Clerk at Lambertville City Hall); and

WHEREAS, the City of Lambertville, Hunterdon County, the Drainage Advisory Committee, and the general public have been given the opportunity by NJDOT to review and comment on the documentation specified in 36 CFR 800.11(e) and entitled "Documentation for Notification of an Adverse Effect: Continuing Section 106 Consultation, Route 29 (1) Project, City of Lambertville, Hunterdon County, New Jersey";¹ and

¹ Copies of this summary documentation for an Adverse Effect are on file at the Army Corps of Engineers, Philadelphia District, and at the New Jersey Historic Preservation Office and at NJDOT-Bureau of Environmental Services, Trenton, New Jersey.

WHEREAS, the project has the potential to affect the existing stone walls of the Delaware and Raritan Canal; and

WHEREAS, the project has the potential to affect the existing landscape of the Delaware and Raritan Canal; and

WHEREAS, the NJDOT will afford the Delaware and Raritan Canal Commission and the New Jersey Water Supply Authority the opportunity to review and comment on the contractor's shop drawings for work within the Canal (the grouting program, the cofferdam system, the temporary impervious liner, and the tunneling efforts for the twin sixty inch [60"] pipes); and

WHEREAS, the NJDOT has designed Contract Documents which were developed in consultation with NJSHPO to ensure that impacts to historic and architectural and natural landscape features of Lambertville Historic District and the Delaware and Raritan Canal Historic District will be minimized/avoided (APPENDIX A); and

WHEREAS, the NJDOT, City of Lambertville, Delaware and Raritan Canal Commission, and the New Jersey Water Supply Authority have participated in the consultation process and have been invited to concur with the finding of adverse effect on historic properties; and

WHEREAS, the USACOE has invited comments from the Delaware and Raritan Canal Commission, the Black River and Western Railroad; the Lambertville Historical Society; the Advisory Council on Historic Preservation; and, through a representative of Delaware Avenue, the residents of Delaware Avenue, in the development of the MOA; and

WHEREAS, the Advisory Council on Historic Preservation has been notified of the Adverse Effect finding and asked to participate; and

NOW, THEREFORE the USACOE, NJDOT, NJSHPO, Delaware and Raritan Canal Commission, New Jersey Water Supply, and the City of Lambertville agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties:

Stipulations

The NJDOT will ensure that the following measures are carried out in conjunction with on-going consultation with the USACOE, NJSHPO, the City of Lambertville, the Delaware and Raritan Canal Commission, and the New Jersey Water Supply Authority:

1. Aesthetic Treatments – As per the Secretary of the Interior's Standards, sidewalk and curbing shall be repaired, retained, replaced, as needed, in-kind or with historically compatible material as per the approved landscape plans signed January 4, 2001, sheets 33 to 35, which were developed to mitigate the project's effect on existing vegetation on Delaware Avenue. The aforementioned plans are attached and made a part of this Memorandum of Agreement, and are referenced as APPENDIX A.

Sidewalks

The aesthetic treatments for the restoration of Delaware Avenue located within the Lambertville Historic District will consist of new brick sidewalk in a forty-five degree (45E) herringbone pattern per historic precedent or new concrete sidewalks and retention of existing

brick and blue stone sidewalks and concrete sidewalks. The specific locations of these materials have been developed based on a questionnaire sent to all property owners on Delaware Avenue affected by the cut and cover methodology. (See APPENDIX A for locational information.)

Curbing

New granite block curbing will be provided along the portion of Delaware Avenue subjected to the cut and cover methodology. (See APPENDIX A for locational information.)

Street Furniture

Existing street furniture at 42 Delaware Avenue will be removed during construction and reset once construction has been completed. To ensure its safe keeping during construction, the street furniture is to be placed in the owner's yard. (See APPENDIX A for locational information.)

Plantings/Tree Program

A certified arborist has visited the Delaware Avenue project site and has assessed the existing trees and their health. As part of the overall landscaping plan, a number of small trees will be removed due to poor health and be replaced with a minimum 3" caliper tree at a one (1) to one (1) ratio. The species selected for the replacement will be *Acer truncatum x platanoides* ("Keithsform" Norwegian Sunset Maple); *Pyrus calleryana* ("Chanticleer" Chanticleer Pear); *Prunus serrulata* ("Kwanzan" Kwanzan Cherry); *Prunus cerasifera* ("Thundercloud" Thundercloud Plum). (See APPENDIX A for locational information.)

Two older trees at 42 Delaware Avenue will be protected by sidewalk bump-outs. An additional tree, at the suggestion of the arborist, will also be protected by a bump-out. (It is noted that these temporary bump-outs shall remain for the life of each tree but can be removed by the City once the tree has died.) (See APPENDIX A for locational information.) NJDOT will provide monetary provisions to the City of Lambertville to replace any trees lost on Delaware Avenue for the period of five (5) years after the landscaping has been completed. During the five (5) years, NJDOT will provide the USACOE a yearly update by December 31, of each year on the status of the trees on Delaware Avenue.

2. Subsurface Remains – Identification and data recovery of significant archeological resources will occur prior to or during construction. In consultation with the NJSHPO, a scope-of-work for the archeological component has been developed (see APPENDIX A). The excavations will be carefully coordinated with the Resident Engineer. In the event that significant resources are uncovered by the archeological consultant, the NJDOT will stop work at that location and the Resident Engineer will be notified immediately. The NJDOT Cultural Resources Manager will be contacted and the archeological specialist from the NJSHPO staff and the USACOE will be notified. A field visit will be planned by the NJDOT and NJSHPO staffs within 1 ½ working days of the find. As a result of the in-field meeting, the agencies will determine if the data recovery plan should be implemented.

3. Delaware and Raritan Canal Historic District – If reconstruction of the Canal walls is necessary due to the placement and location of the impervious liner, the guidelines developed by the Delaware and Raritan Canal Commission for rehabilitation and reconstruction of existing stone walls will be utilized. NJDOT will consult with the Delaware and Raritan Canal Commission regarding removal of trees in excess of six-inch (6") diameter.

4. Construction Conditions

Excavation

When completed, the trunkline will be below grade and will cause no visual impacts to the Lambertville Historic District and the Delaware and Raritan Canal Historic District. The open trench excavation will be within the roadway, at least three feet (3') from the curb to minimize/avoid impacts to the curbside root systems. Trenching technique methodologies will be non-percussive. The level of vibrations generated by construction activities will not exceed peak limitations of 15mm per second as set per the Contract Documents and overseen and monitored by the Resident Engineer per the Contract Documents. Noise and vibrations caused by the construction will be monitored by NJDOT throughout the project construction per the Contract Documents. Exceedance of limitations will be corrected by the Resident Engineer. (See APPENDIX A).

A structural survey of both the interior and exterior of the houses on Delaware Avenue will be conducted by NJDOT prior to construction. Another survey will be conducted at the conclusion of construction. If unforeseen damage is caused by the construction, it is to be addressed per the Contract Documents (see Section 107 of Division 100 of 1996 New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction).

5. Design Changes

If any changes from the proposed **Delaware Avenue Trunkline Installation Project** design are proposed, the NJDOT shall notify the USACOE. The USACOE shall consult with the New Jersey Historic Preservation Office in accordance with 36 CFR Part 800 and 33 CFR 325 Appendix C.

6. Dispute Resolution

The USACOE shall ensure that the NJDOT will comply with all stipulations as set forth herein. Should the NJSHPO object within 30 days to any submissions provided for review pursuant to this agreement, the USACOE shall consult with the objecting party to resolve the objection. If the USACOE determines that the objection cannot be resolved, the USACOE shall request the further comments of the Council pursuant to 36 CFR Part 800. Any Council comment provided in response to such a request will be taken into account by the USACOE in accordance with 36 CFR Part 800 with reference only to the subject of the dispute; the USACOE's responsibility to carry out all actions under this agreement that are not the subjects of the dispute will remain unchanged.

7. Project Completion

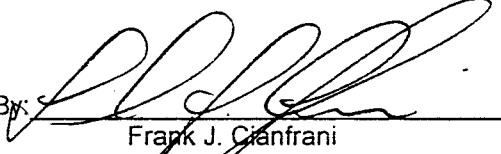
Within three (3) months of the project completion, a pictorial report, and pre- and post-construction structural surveys, will be submitted to the NJSHPO and USACOE as documentation that the project has been completed according to the agreed upon design and Stipulations.

8. Review of Implementation

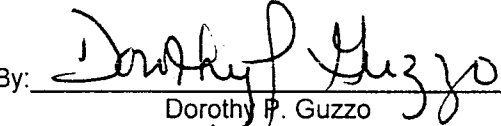
Mitigation work stipulated in this MOA will begin within six (6) months of completion of the installation of the trunkline and secondary drainage, and will be completed within two (2) years of the completion of the installation of the trunkline and secondary drainage.

Execution of this Memorandum of Agreement by the USACOE, the NJDOT, the NJSHPO, the City of Lambertville, the Delaware and Raritan Canal Commission, and the New Jersey Water Supply Authority, and the implementation of its terms, evidence that the USACOE has afforded the Council an opportunity to comment on the **Delaware Avenue Trunkline Installation Project** and its effects on historic properties, and that the USACOE has taken into account the effects of the undertaking on historic properties.

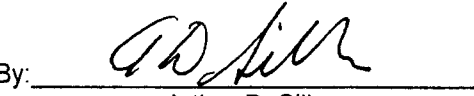
UNITED STATES ARMY CORPS OF ENGINEERS

By:  Date: 4/10/01
Frank J. Cianfrani
Chief, Regulatory Branch

NEW JERSEY STATE HISTORIC PRESERVATION OFFICER

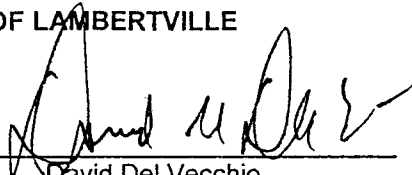
By:  Date: 4/20/01
Dorothy P. Guzzo
Deputy State Historic Preservation Officer

NEW JERSEY DEPARTMENT OF TRANSPORTATION

By:  Date: 4/11/01
Arthur D. Silber
Director, Division of Project Management

CITY OF LAMBERTVILLE

By: _____

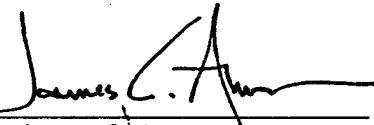

David Del Vecchio
Mayor

Date: _____

4/11/01

DELAWARE AND RARITAN CANAL COMMISSION

By: _____

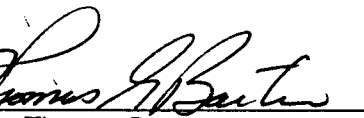

James C. Amon
Executive Director

Date: _____

11 April 2001

NEW JERSEY WATER SUPPLY AUTHORITY

By: _____


Thomas Baxter
Executive Director

Date: _____

4-26-01